# Huawei in Central and Eastern Europe: Trends and Forecast









#### **HUAWEI IN CENTRAL AND EASTERN EUROPE: TRENDS AND FORECAST**

#### **Briefing Paper**

January 2021

Editor – Ivana Karásková

Authors – Konstantinas Andrijauskas, Alicja Bachulska, Una Aleksandra Bērziņa-Čerenkova, Ivana Karásková, Andreea Leonte, Tamás Matura, Matej Šimalčík

Citation – Karásková, I. (ed.) (2020). Huawei in Central and Eastern Europe: Trends and Forecast. Prague, Czech Republic, Association for International Affairs (AMO). The publication was prepared within the **China Observers in Central and Eastern Europe** (**CHOICE**) collaborative platform. CHOICE monitors and evaluates the rising influence of the People's Republic of China in countries of Central and Eastern Europe which participate in the China-proposed 17+1 initiative. CHOICE strives to build a multinational platform for open discussion, experience-sharing and critical assessment. CHOICE is run by the Association for International Affairs (AMO), a Prague-based foreign policy think tank and NGO. The preparation of this paper was supported by a grant from National Endowment for Democracy (NED).

Typesetting – Zdeňka Plocrová Print – Vydavatelství KUFR, s.r.o. – tiskárna

ASSOCIATION FOR INTERNATIONAL AFFAIRS (AMO)

Žitná 27/608 CZ 110 00 Praha 1 Tel.: +420 224 813 460 info@amo.cz www.amo.cz

© AMO 2021 ISBN 978-80-87092-86-6 (print version) ISBN 978-80-87092-85-9 (pdf version)

# **Table of Contents**

Summary	5
Introduction: CEE on the road to security distancing	7
Romania: decisive opponent	9
Poland: hardening stance	11
Latvia: no place for ambiguity	13
Lithuania: value-based rejection	15
Czech Republic: resolute hesitation	17
Slovakia: undecided latecomer	19
Hungary: cordial welcome	21
Authors	23
About CHOICE	25
About AMO	27
Footnotes	29

# Summary

- → The issue of 5G network security in selected countries of Central and Eastern Europe (CEE) is mostly associated with Huawei, the most visible Chinese telecom company with the highest share of components in local networks.
- → Active US diplomacy in CEE, visibly backed by increased frequency of visits by members of the US administration to the region, resulted in a more cautious position of the local governments on the involvement of Chinese telecom companies in 5G networks.
- → While some (namely Hungary) have refused to treat Chinese telecom companies as a security threat, others have become more critical declaring their adherence to EU recommendations on the matter and/ or signing a joint declaration with the US on 5G security. However, the trend towards taking into account non-technical factors when assessing 5G network risks does not inevitably equal a ban on Huawei in a nation's network. Thus, in some countries, the issue has not yet been conclusively resolved.
- Romania seems to have the strongest position on Huawei within the region, as it signed a memorandum of understanding on 5G security with the US as the first country already in 2019. Moreover, it also drafted a law stipulating all manufacturers of technologies, equipment and software programs, which are intended for the use in the national 5G networks, need to obtain an authorization granted by the decision of the prime minister. So far Huawei's prospects for participating in the build-up of the 5G infrastructure in Romania are slim.
- → Poland has drafted an amendment to the existing cybersecurity law which will enable exclusion of the vendors categorized as high-risk from the Polish market. ICT providers will be assessed based on a number of categories, including non-technical risks, some of them indirectly pointing at Huawei. Any drastic reversal of the current policy towards Huawei seems unlikely.
- → Latvia ended its ambiguity on Huawei in February 2020 when it signed the joint declaration on 5G security with the US. Since then, local telecom companies aired their preference of telecom companies from Sweden and Finland. The local mobile network operators are becoming increasingly aware of the risks of cooperation with Huawei, making its participation in 5G network infrastructure in Latvia very unlikely.

- → Lithuania, which closely follows Polish and US positions on the Huawei issue, signed a memorandum of understanding on 5G security with the US in September 2020. Telia Lietuva declared the initial phase of launching the 5G mobile network with Ericsson. Considering the victory in the election of the moderate right wing coalition, declaring its aim to conduct value-based foreign policy and criticizing countries violating human rights, no major shift in Lithuania's current policy on the 5G in general and Huawei in particular is expected.
- → The Czech Republic was an early skeptical voice on 5G security in the European debate, already voicing concerns in 2018. Moreover, it contributed significantly to the debate with the Prague Proposals. However, the situation is far from decided, as the government balances warnings from the security community with other domestic political considerations ahead of the general election in 2021.
- → Slovakia is a relative newcomer to the 5G security debate. It signed a joint declaration with the US in October 2020 and, ever since, its National Security Authority has been drafting a Decree on 5G security measures. However, the measures are to be implemented only in an NSA Decree rather than an Act of the National Council, meaning they can be easily amended, or even canceled, by the decision of the NSA Director. Slovakia is yet to enjoy an intense political debate on the issue.
- → Hungary did not ban the use of Huawei's technology in the 5G networks and it does not seem probable that the current policies of Budapest will change in the foreseeable future. The Orbán government and Huawei announced the establishment of a new Huawei R&D centre in Budapest, serving as further evidence of the stable environment the company enjoys in Hungary.
- Four major possible factors should be taken into account when forecasting future trends: the change of a government of the given country after the general election, the position of Germany, the considerations of local telecom companies, and bilateral ties with the US and the continuous push for exclusion of Huawei from CEE counties' 5G networks by Washington.

# Introduction: CEE on the road to security distancing

Ivana Karásková

This briefing paper summarizes ongoing debates on Huawei's involvement in the build-up of 5G networks in seven Central and Eastern European countries: Czechia, Hungary, Latvia, Lithuania, Poland, Romania and Slovakia. The paper resulted from discussions among China Observers in Central and Eastern Europe (CHOICE), a unique collaborative research platform bringing together China analysts from the region of Central and Eastern Europe.

The first aim of the briefing paper is to provide an up-to-date overview of the current state of the ongoing debates about Huawei's possible participation in 5G networks. More importantly, based on the former step, it attempts to determine trends to watch in the seven CEE countries, weighs the probability of future shifts in the local debates on Huawei and assesses whether the debates are primarily driven by the governments and their agencies, by external players or by local telecom companies.

While having other connotations, the issue of security of 5G networks in selected Central and Eastern Europe countries is mostly associated with Huawei, a Chinese telecom company with the highest share of components in local networks and arguably the most active Chinese telecom company in the region. ZTE and other Chinese companies have, at least so far, had less visible presence in the region.

Active US diplomacy in Central and Eastern Europe, backed by increased frequency of visits by members of the US administration to the region, resulted in a more cautious position of the local governments on the involvement of Chinese telecom companies in 5G networks. While some (namely Hungary) have refused to see Chinese telecom companies as a security threat, majority of CEE countries remain cautious and declared they would adhere to the EU recommendations on the manner and/or signed a joint declaration with the US on 5G security. The trend towards taking into account non-technical factors when assessing 5G network risks is visible in most of the countries covered in this briefing paper. Yet the trend towards being more cautious does not equal (so far) a ban on Huawei in a nation's network. In some countries, the issue has not been finally resolved.

Four possible factors should be taken into account when forecasting future trends – a possible change of the country's government, the position of Germany, the considerations of the local telecom companies, and bilateral ties with the US and the continuous push for exclusion of Huawei from CEE counties' 5G networks by Washington.

First, as seen in Slovakia and Lithuania, where China-skeptical political parties formed governments after general election, the attitude towards Chinese telecom companies can change quickly and dramatically. The Czech Republic heads to the

general election in 2021 and the current government is quite reluctant to decide on the issue prior to the vote. Depending on the outcome of the election, the issue may remain in a stalemate, or perhaps it can move quickly towards the exclusion of Huawei from the 5G networks. It remains to be seen.

Second, the economies of virtually all CEE countries are oriented towards Germany, which may prompt the countries in the region to follow Berlin's lead on this issue. The German government announced the new 5G legislation in December 2020, yet the Bundestag has not passed the law yet. Given the CEE countries' orientation towards Berlin, German decision on 5G networks has a great potential to influence drafting of CEE countries' regulations as well as the final decision on 5G networks suppliers.

Third, local telecom companies also play an important role. In the past, many sought partnership with Chinese companies due to simple financial considerations and as a consequence of the prevalence of Huawei's components in their existing networks. The US sanctions, however, changed the calculus of the business sector, as entering a contract with a company under US sanctions could prove problematic, especially as Huawei potentially faces problems with accessing crucial components. Moreover, the local companies fear the possibility of banning Huawei from the networks in the future may increase their final costs and lower their chances in public procurement. Hence, the decision on Huawei could practically result from the telecom companies choosing a more expensive, yet less problematic partner for building 5G networks without the need of the country's government to explicitly rule out the Chinese telecom company.

Finally, CEE countries, especially Baltic states, Poland and Romania, consider US their primary security provider. The Trump administration has been successful in advocating for a more cautious approach regarding the Chinese telecom companies. The local governments as well as telecom companies apply a wait-and-see approach regarding the incoming Biden administration and its course on China. Though it is unlikely the US will change its course on China policy significantly, a loss of focus and determination could have tangible repercussions for the Central and Eastern European approaches to the security of 5G networks.

# Romania: decisive opponent

#### **Andreea Leonte**

Although Huawei has a large presence in Romania in the existing 3G and 4G networks, having close relations with most telecommunications operators, as well as a regional support center in Bucharest, its chances to lead the Romanian 5G rollout are extremely small.

Romania has not yet organized the 5G tender, despite it being initially scheduled to take place last year. The tender was postponed for 2021, as the legislative framework detailing the obligations of future suppliers is still pending. The reason for the delay was that the Romanian government was waiting for the European Commission to enact measures concerning the security of 5G networks in the EU.

Regarding 5G, Romania was the first country to sign a Memorandum of Understanding¹ (MoU) with the US, on the occasion of a presidential visit to Washington by Klaus Iohannis, on August 20, 2019. The MoU provided for the rigorous evaluation of all future 5G vendors to determine if they have a transparent ownership structure and ethical corporate practices, as well as if they are subject to the control of a foreign government, outside an independent judicial review. Although this document did not explicitly exclude Huawei from supplying 5G equipment to Romanian telecommunication operators, the company could hardly meet the conditions named in the MoU. At the same time, the MoU should be interpreted in conjunction with the US Federal Register of Entities,² which lists all entities believed to pose serious national security/foreign policy threats. Huawei was added to the list on May 15, 2020, together with other 114 of its overseas-related affiliates.³ Since Romania has pledged to have a close cooperation with the US on 5G security, the chances that Huawei could win the 5G bid are remote.

After his visit to the White House, the Romanian president Iohannis discussed the MoU with Romania's National Defense Council (CSAT) regarding how to transpose it into national law. A year later, on August 4, 2020, a first draft law<sup>4</sup> was published on the website of the Ministry of Transport, Infrastructure and Telecommunications.

The draft law states that all manufacturers of technologies, equipment and software programs, which are intended for the use in the national 5G networks (as well as in the information and communication infrastructures of national interest), should obtain an authorization, granted by decision of the prime minister. However, the authorization is conditioned by a favorable opinion from the CSAT, after performing a thorough assessment of the risks, threats and vulnerabilities to the national security and/or national defense of the equipment manufacturer. The authorization may be withdrawn following the same procedure.

The draft law also mandates the National Communications Authority (ANCOM) to request detailed information about the technologies, equipment, and software used in 5G networks, as well as their manufacturer, the degree of outsourcing to third

parties of certain activities related to the management of electronic communications networks provided. Failure to provide this information can result in heavy fines. Moreover, the law sets out measures for phasing out the technologies, equipment and software currently in use from noncompliant providers.

On September 11, 2020, Huawei contested Romania's new 5G security rules in a letter to Margrethe Vestager, the European Commission's executive vice-president responsible for EU digital policies.<sup>5</sup> The letter was sent by Huawei's Belgian subsidiary, which argued that the new rules follow biased and ambiguous criteria, which are in violation of EU law. The CEO of Huawei Romania also opined that the law was introduced in public debate for too short a time, only between August 4 and 17, thus the telecom industry specialists could not assess its impact.<sup>6</sup> The Commission, however, dismissed these allegations, noting that member states may adopt national cyber security rules through European telecoms legislation.

In November 2020, Romania's prime minister Ludovic Orban<sup>7</sup> explicitly excluded a partnership with the company in an interview for Radio Europa Libera<sup>8</sup> – a direct consequence of Romania's strategic partnership with the US on security issues. We can, thus, conclude that Huawei's prospects for participating in the construction of the 5G infrastructure in Romania are slim.

# **Poland: hardening stance**

#### Alicja Bachulska

For more than a decade, Huawei's presence in Poland has steadily grown in both consumer and infrastructure domains. Since 2006, the Chinese firm participated in the construction of Polish 2G and 3G networks with the help of multiple loans from China Development Bank.<sup>9</sup> As a result, most Polish telecommunication operators and their networks have been largely built using Huawei's equipment and solutions. The Chinese tech giant has also become one of the most popular sellers of mobile handsets in the country. In 2018, it progressed toward the number one smartphone seller in Poland.<sup>10</sup> In 2019, however, it was overtaken by Xiaomi, another Chinese handset producer, as controversies and restrictions surrounding Huawei started to affect consumer behavior.<sup>11</sup>

Huawei has also become an active player in the Polish 'people-to-people' environment. It has cooperated extensively with a number of universities and has established bilateral cooperation through institutions such as Huawei Authorized Information and Network Academy at Poznań University of Technology¹² or ICT Academy at Kozminski University in Warsaw.¹³ It has actively promoted its own initiatives targeting young talents, for example through the program of Seeds for the Future, which enables the selected students to visit Huawei's headquarters in Shenzhen and its research facilities in Beijing.¹⁴

The company made the headlines in Poland and worldwide in January 2019, when a Chinese Huawei employee was arrested in Warsaw on allegations of spying. On top of that, the case involved a former Polish security officer, who was later on released on bail, while the Chinese national has remained under arrest as the authorities have continued to investigate the case. <sup>15</sup> In mid-November 2020, the two men were finally indicted after almost two years of preparatory proceedings. <sup>16</sup>

These events have accelerated Poland's domestic debate on the role of Huawei in constructing the country's 5G networks. Simultaneously, growing tensions between China and the US have also affected Warsaw's perception of threat vis-à-vis Beijing. As the US remains Poland's key ally in the post-Cold War order, Sino-American strategic rivalry has resulted in Warsaw's growing skepticism towards unconditional cooperation with Beijing.

During the visit of the US vice president Mike Pence to Poland in September 2019, the two countries signed the US-Poland Joint Declaration on 5G.<sup>17</sup> The Polish prime minister Mateusz Morawiecki has also promoted the notion of "European 5G realism", which in practice means more awareness of risks stemming from technological cooperation with actors from non-democratic states.<sup>18</sup>

Currently, the most important legal tool that could result in Huawei's ban in Poland is a draft amendment to the existing cybersecurity law published on September 7, 2020<sup>19</sup>. Some of its provisions suggest that vendors categorized as high-risk would

be banned from the Polish market. ICT providers will supposedly be assessed based on a number of categories, some of them indirectly pointing at Huawei. For example, firms from countries outside of the EU might undergo greater scrutiny for political and security reasons. The new law is supposed to come into force by December 21, 2020. At the time of writing, however, the ultimate form of the amendment remains unclear.

In the nearest future, Poland will most probably witness a growing trend towards diversification of telecommunications services providers stemming from both practical and political considerations.

Warsaw might also try to play a more proactive role in terms of managing the European cyberspace. Poland's recent attempt<sup>20</sup> to make the case for the country to host the new European Cybersecurity Industrial, Technology and Research Competence Center might serve as a case in point.<sup>21</sup> Any drastic reversal of the current policy towards Huawei seems unlikely as Poland slowly but rather consequently keeps distancing itself from the Chinese provider.

# Latvia: no place for ambiguity

#### Una Aleksandra Bērziņa-Čerenkova

Latvia became the second among the Baltic countries, after Estonia, to sign the Joint Declaration on 5G Security with the US<sup>22</sup> on February 27, 2020, ending a period of political ambiguity on the issue. The text of the document remains classified. However the Latvian public broadcaster has reported that according to its sources the text speaks of Latvia's commitment to examine "whether a 5G technology supplier isn't creating security risks".<sup>23</sup> The Minister of Foreign Affairs implicitly reaffirmed the most probable exclusion of Huawei: "These companies have to take into account that there will be certain questions at the moment when they'll want to cooperate with state structures, especially with those state structures that deal with security, foreign policy and issues of such level."<sup>24</sup>

Although the joint declaration, as in other cases, is a non-binding one, under the current circumstances, the entry and development of Huawei in the segment of 5G networks can be characterized as "never say never, but extremely complicated". Interestingly, unlike in North Macedonia or Cyprus, the signing of the declaration was not followed by a reaction or statement of the Embassy of the People's Republic of China.

A strong signal that Latvia plans to rely on Northern European 5G infrastructure providers also came from the Ministry of Defense, as the "first 5G military test site in Europe"<sup>26</sup> was launched at the Ādaži base by the mobile network operator Latvijas Mobilais Telefons (LMT) on November 13, 2020. LMT, the majority stake in which is owned by the state of Latvia, and the minority stake by the Swedish-Finnish Telia-Sonera, is cooperating with Nokia on 5G. The 5G military test site featured only 5G routers locally produced by the Latvian company MicroTik.

The remaining two network operators aside from LMT (namely Tele2 and Bite) followed the ambiguous approach longer, but it is also coming to an end. Bite Latvija, owned by the US private equity investment fund Providence Equity Partners LLC<sup>27</sup> through Bite Lietuva, had signed an MoU on cooperation in 5G networks with Huawei in 2018, and had been consistently voicing a pro-Huawei position: "Latvian mobile phone operator Bite Latvija will not suspend its partnership with the company and will go forward with its plans to introduce a 5G network with the help of Huawei."<sup>28</sup> However, upon the signing of the Joint Declaration, Bite's messaging became less assured, claiming that even though "it's still unclear which company's technology will be used", Bite is "developing a 5G network in cooperation with (..) Tele2, (...) Tele2 is also developing a parallel 5G network using Nokia infrastructure".<sup>29</sup>

As in similar cases across Europe, one cannot say with full certainty that Huawei will be excluded from the rollout of the 5G network in Latvia. Still, the local mobile network operators (MNOs) are becoming increasingly aware of the risks the cooperation with Huawei will bring, making Huawei participation in 5G network installation in Latvia very unlikely. Certainly, the final decision of Bite Latvia is a towatch aspect, as currently it is the only mobile network operator that had planned to cooperate with Huawei. Although the MNOs are generally reluctant to commit to the exclusion of Huawei, and the issue is mostly promoted by the defense-oriented government actors, the leeway of mobile network operators is very limited, because the push towards the exclusion of Huawei ultimately comes from Latvia's primary security guarantor – the United States.

# Lithuania: value-based rejection

#### Konstantinas Andrijauskas

Despite, or rather because of, recognition of its huge potential, the 5G issue has been increasingly securitized during the last three years in Lithuania. Curiously, however, Lithuania was destined to do so even without any Chinese role due to spectrum interference dispute with Russia. Notably, the Russian digital "frequency occupation zone" created by military radars and satellite communication stations within the neighboring Kaliningrad exclave covers more than one-third of Lithuanian territory, precluding normal and safe development of the national 5G network.<sup>30</sup>

As is the case elsewhere in the region, the rise of the Chinese factor in related threat perceptions was primarily associated with the US position on the issue, but also had a lot to do with spying accusations against Huawei in neighboring Poland,<sup>31</sup> as close partnership with both of those countries is considered crucial for Lithuanian security. Although China or its companies were not mentioned explicitly in this context, Lithuania's 2020 National Threat Assessment for the first time outlined that "development of 5G technology without sufficient focus on the trustworthiness of the IT service or product provider may become a new risk factor."<sup>32</sup> Lithuania's Ministry of Defense had previously indicated that Chinese technology will not be included in militarily sensitive installations.<sup>33</sup>

On the other hand, Huawei has been regularly trying to positively highlight its public image throughout some ten years of operation in Lithuania. The company performed the first major publicity campaign by any Chinese entity in the country while serving as the official sponsor of the Lithuanian Basketball Federation in 2014-2016.<sup>34</sup> Subsequently, in early September 2020, the Federation announced a new cooperation agreement with Huawei.<sup>35</sup> This time, however, the company's profile seemed to be even larger, as its name was attached to the title of Lithuania's women's basketball league. Huawei's attention to its image and reputation has been further highlighted by a court case won against one of Lithuania's prominent news portals which thus had to officially refute the statements about the company's activities in Africa.<sup>36</sup> Despite these efforts, Huawei's main goal within the country remained beyond its reach.

Indeed, as of the end of 2020, the complex matter in question seems to have been settled since Lithuania became the last Baltic state to sign a Memorandum of Understanding on 5G Security<sup>37</sup> with the US in mid-September 2020. Although China was not mentioned explicitly either, the practical results of this document were not long to become apparent. Less than two months later, Telia Lietuva, the largest telecommunications and information technology company in Lithuania, legally recognized as an enterprise of importance to ensuring the country's national security,<sup>38</sup> declared the initial phase of launching the 5G mobile network under a just signed strategic partnership with another and more famous company of Swedish origin, Ericsson. Telia's press release revealed that existing Huawei's radio access network

equipment will be gradually phased out throughout several upcoming years using Ericsson's hardware instead.<sup>39</sup>

Considering the October 2020 general elections outcome, it is hard to imagine a major shift in Lithuania's current policy on the 5G in general and Huawei in particular, even if the new Joe Biden's administration would be more forthcoming on the issue than its predecessor. Indeed, Lithuania's victorious moderate right wing coalition went as far as officially pledging that the new government will conduct a "values-based foreign policy" that "will actively oppose any violation of human rights and democratic freedoms and will defend those fighting for freedom around the world, from Belarus to Taiwan".<sup>40</sup> Thus, it is widely expected that before the upcoming radio frequencies auction all of the country's telecommunications providers will follow the example set by Telia, finalizing the exclusion of Huawei from development of the local 5G network as a result.

# **Czech Republic: resolute hesitation**

Ivana Karásková

The Czech Republic's state agency National Authority on Cyber and Information Security (NÚKIB) published a public warning on ZTE and Huawei in late 2018, which made the country an early skeptical voice in the European debate on involvement of Chinese telecom companies in 5G. What was interesting about the warning was not only the timing, but the baseline of the arguments which mainly focused on non-technical aspects of the risks posed by the Chinese telecom companies. Specifically, it mentioned the legal and political framework of the People's Republic of China which requires Chinese companies and citizens to cooperate with Chinese authorities, including on intelligence activities. Further, it mentioned Chinese intelligence operations, which have long been pointed out by the Czech counterintelligence agency (BIS).<sup>41</sup>

The warning prompted the state's reaction, leading to the evaluation of the use of ZTE and Huawei products in the networks of Czech state institutions covered by the cybersecurity law and the exclusion of Huawei from the tender on building a tax portal<sup>42</sup> and the tender on body scanners at the Prague's Václav Havel airport<sup>43</sup>. It also led to an undiplomatic and assertive reaction from the Chinese Embassy in Prague and a subsequent diplomatic rift, in which the Chinese Ambassador interpreted NÚKIB's warning as a "mistake" and the Czech prime minister Andrej Babiš publicly called him a liar.<sup>44</sup> In reaction to the security warning Huawei threatened a legal action.<sup>45</sup>

To calm down the situation and in order to reach a broader consensus, Babiš later called on the issue of 5G security to be debated on the EU level. Also the minister of trade and industry Karel Havlíček indicated that the Czech decision should follow the approach of the neighboring countries, particularly Germany and Poland.<sup>46</sup>

In May 2019, the so-called 'Prague Proposals', an outcome of an international conference on the security of 5G networks, followed the logic of the warning of NÚKIB by focusing on non-technical aspects (such as political and economic behavior) when assessing risks posed by foreign vendors. A year later, the Czech Republic signed a joint declaration on 5G security with the US. However, prime minister Babiš avoided a direct question on the matter during the meeting with Mike Pompeo in August 2020,<sup>47</sup> claiming the decision on Huawei's engagement in the 5G future is yet to be reached and repeating again that it should take place at the EU level.<sup>48</sup>

Thus, the Czech government's stance has remained ambiguous as to whether it will exclude Huawei from Czech 5G networks, with no plans to prepare a national legislation on the matter. The national investment screening regulation does not apply as it focuses only on investment to companies from investors from outside of the EU, but does not concern purchases of components and services. While the government takes the warnings of the security community seriously, prime minister Babiš needs

to balance the preferences of the security community against other domestic political players with opposing views, most notably the Czech president Miloš Zeman, who on a number of previous occasions downplayed the warnings against ZTE and Huawei products.

Czech telecommunication companies thus operate in uncertainty, as they need to weigh the security community's warnings and signals from political stakeholders (such as the Prague Proposals, EU 5G Toolbox, etc.) against business rationale. Vodafone broke the silence in May 2020, announcing that in accordance with the policy of Vodafone UK, the Czech branch will use Huawei technology only in non-core parts of the network.<sup>49</sup> CETIN, the Czech telecoms network operator, announced in October 2020 it will use technology from Ericsson to build 5G networks.<sup>50</sup> CETIN is a part of investment group PPF, which also holds 81% in mobile operator O2 Czech Republic. However, CETIN representative has not ruled out the possibility of cooperation with Huawei later in the future.<sup>51</sup>

Huawei has been very active in trying to influence the Czech public debate on 5G. Apart from running a promotional website on 5G in the Czech Republic<sup>52</sup>, it also hired the local law company Toman, Devátý and partners that challenged the NÚKIB interpretation of the non-technical risks posed by links of the vendors to foreign governments. According to the law firm, the supplier does not have the possibility to influence the legislation of a certain country and should not be excluded without a prior assessment of its risk.<sup>53</sup> In March 2020, the Czech economic think tank CETA published an analysis<sup>54</sup> estimating additional financial costs (amounting 38 billon Czech crowns) that the exclusion of Huawei would bring to the Czech Republic. The study, however, was based on models developed by the British Research Center Oxford Economics for Huawei.<sup>55</sup> Moreover, recently the company has been very active in placing commercial articles to local media.<sup>56</sup>

Three possible factors should be taken into account in forecasting future trends in the Czech Republic – the outcome of the general election in 2021, the position of Germany and the US, and considerations of telecom companies. First, Andrej Babis's government is reluctant to make a decision on the issue of Huawei, at least not before the outcome of the general election in fall 2021. Depending on the outcome of the election, the issue can either remain a stalemate or move quickly toward excluding Huawei from 5G build up. Second, as Czech economy is oriented towards Germany and German legal environment serves as a frequent inspiration to the Czech lawmakers, much depends on the German position in terms of allowing or banning untrusted vendors from its 5G networks. Naturally, the position of the US is also an important factor in decision-making process. Finally, the Czech telecom companies have been so far operating in a state of uncertainty and in a need to count in their business calculations not only the particularities of the Czech domestic politics, but also the broader position of the EU and the position of the incoming Biden administration on China. If they want to build the 5G networks quickly, they may need to come to a decision sooner than the Czech government is willing to.

## Slovakia: undecided latecomer

#### Matej Šimalčík

Compared to some of its neighbors, Slovakia's discussion about the role of Chinese companies in the 5G development started to develop quite late. Not so long ago, in 2019, Slovak representatives proclaimed they are open to cooperation with Chinese tech companies, including on 5G.<sup>57</sup> However, since the February 2020 general election which ushered in a new government, the Slovak stance on the involvement of Chinese entities in 5G network construction started to change and as of autumn 2020 the situation has been changing quite dynamically. Three events indicate a 'harder' position of the government compared to its predecessor.

First, in June 2020, the Regulatory Authority for Electronic Communications and Postal Services canceled the planned auction of the 5G broadband. It was speculated in the media that the cancellation was a result of intervention by the Slovak counterintelligence service (SIS) which supposedly warned against certain security risks connected to the auction.<sup>58</sup> Indeed, the SIS 2019 Annual Report stated that Chinese intelligence focused on promoting Chinese telecommunication companies and establishing ties with the staff at relevant government agencies in Slovakia.<sup>59</sup> The auction was finalized at the end of November 2020, with all four Slovak mobile operators managing to secure access to the 5G band (although the China-linked Swan Mobile secured only a limited access compared to the remaining three).

Second, in the beginning of October 2020, Slovak media reported that president Zuzana Čaputová threatened to cancel her participation at a major international security conference due to its ties to Huawei. "For me, it is not only a question of security, but also of principles and values," stated Čaputová.<sup>60</sup> Her strongly worded criticism resulted in the conference organizer cancelling the cooperation with Huawei.

Third, at the end of October 2020, foreign minister Ivan Korčok and US secretary of state Mike Pompeo signed a Joint Declaration on 5G Security. This complements the already adopted EU Toolbox on 5G security. By signing the document, Slovakia pledged to screen the vendors' reliability with reference to control by a foreign government, transparency of ownership and corporate governance, vendor's respect for intellectual property rights, and record of ethical corporate behavior.<sup>61</sup>

An important issue to look out for in the coming months is the implementation of these principles into national legislation. As neither the Joint Declaration nor the EU Toolbox is a legally binding document, the manner of implementing the security criteria and their evaluation is a crucial aspect to watch for.

Currently, the National Security Authority is drafting a Decree on 5G security measures.<sup>62</sup> The very fact these measures are to be implemented only in an NSA Decree rather than an Act of the National Council may pose certain risks as it can be amended, or even canceled, by the decision of the NSA Director (compared to a full

legislative process in the National Council). To this day, a draft of the Decree has not been made available to the public.

So far, it is not clear what will be the role of the mobile network operators in evaluating the vendor reliability. Letting the network operators to determine the reliability and security compliance of vendors can have a big impact on network security. Already, some Slovak network operators have shown a propensity to cooperate with Chinese companies on network development. For example Swan Mobile (partially owned by the Chinese government) used ZTE technology to develop its 4G network<sup>63</sup> and to launch a 5G trial network in 2019.<sup>64,65</sup>

Nevertheless, only a third of Slovak population favor Chinese vendors as suppliers of the network equipment, ranking far behind European and Japanese vendors.<sup>66</sup> Similarly, over half of the population thinks that cybersecurity should be a priority for Slovak policy towards China.<sup>67</sup>

Thus, it should come as no surprise that Huawei has gone on a PR counter-offensive to soften the blow of a harder government stance.<sup>68</sup> Despite this counteroffensive, it seems unlikely Huawei will be able to sway the opinion of key policy makers. Indeed, the chairman of the parliamentary Defense and Security Committee stated that the National Council is wary of security risks posed by Chinese tech companies.<sup>69</sup> Recognition of these risks was translated into the new Security Strategy of the Slovak Republic, which was adopted by the government in December 2020. The government claimed that it will ensure that construction of critical communication and data transfer infrastructure is built using only equipment and technologies that don't pose security risks and originate from Slovakia's partners and allies.<sup>70</sup>

As all the key documents mentioned here are still in the drafting process, Slovak position on Chinese tech companies will become clearer in the coming months.

# **Hungary: cordial welcome**

#### Tamás Matura

The Huawei issue is not in the forefront of public discourse in Hungary. The Chinese company has been mentioned for three times only in the Hungarian Parliament since the last elections in 2018, and all three occasions were in late 2019, so the plenary sessions of the parliament have not touched upon the issue for almost a year by now. The lack of political interest is somewhat surprising given that the Hungarian foreign minister announced the involvement of Huawei in the development of the 5G network of the country on November 5, 2019, in sharp contrast to the policies of most other CEE countries.<sup>71</sup>

Based on the political debate a few government-formulated arguments can be identified. First, the Hungarian state itself does not develop a 5G network, as it is being developed by German and British multinational telecommunication companies, thus the government cannot do anything about it. Second, Huawei's technology can be found in the system of other EU countries as well. Third, the network in Hungary will consist of a mix of technology provided by multiple companies, not by Huawei alone. Fourth, further digitalization and the development of the 5G network is a must to preserve the competitiveness of the Hungarian economy. Fifth, there is a solid legal framework that guarantees the safety and privacy of data flows in Hungary, and it is the responsibility of the service provider to comply with the relevant regulations.

Meanwhile, opposition parties have pointed at security issues in the parliamentary debate. Those very few speeches in the national assembly that did mention Huawei in the past two years have referred to a few concerns and prescriptions of their own. First, Hungary is a NATO member and thus it should be more cautious in its cooperation with Huawei since the pro-China policy of the government may harm the alliance system of the country. Second, as Huawei may pose a national security threat, the Hungarian government should prefer cooperating with European companies like Nokia and Ericsson. Third, Hungary should not swim against the tide as it endangers its data and information security.<sup>72</sup>

The Hungarian media coverage on the issue is not extensive either, as the two biggest online news portals and two significant dailies of the country have published, so far, no more than a dozen and half articles combined on the Huawei related security concerns. Based on these articles (though it is hard to draw well-founded conclusions due to the low number of coverage) one may have the feeling that pro-government media outlets tend to publish less articles about the issue and their tone is either neutral or follows the argumentation of the government. Meanwhile, media outlets that do not support the government have had more articles on the matter and their message focused more on security related concerns and the arguments of the US.

The Hungarian government was one of the few in the CEE region to resist US pressure despite the sympathy of prime minister Viktor Orbán to the Trump ad-

ministration, and Budapest has not banned the use of Huawei's technology in the 5G network of the country. Given the less than enthusiastic feelings of the Hungarian government about the incoming Biden administration, it seems probable that the current policies of Budapest are here to stay for the foreseeable future. If Biden administration is to follow a less confrontational approach towards China, as many expect, there will be even less pressure on Hungary to cut its ties to Huawei. The government and the Chinese telecom giant announced the establishment of a new Huawei R&D centre in Budapest in late October 2020, serving as further evidence of the stable environment the company enjoys in Hungary.<sup>73</sup>

An EU level ban may put the Hungarian government into an inconvenient position, but the probability of such a development towards a joint EU position currently seems to be very low. In sum, there is nothing on the horizon to threaten the favorable positions of Huawei in Hungary.

## **Authors**



**Konstantinas Andrijauskas**, Ph.D., is an Associate Professor of Asian Studies and International Politics at Vilnius University, Lithuania.



**Alicja Bachulska** is a China analyst at Asia Research Center, War Studies University in Warsaw, Poland. She is also a Ph.D. candidate at the Polish Academy of Sciences' Graduate School for Social Research (GSSR).



**Una Aleksandra Bērziņa-Čerenkova**, Ph.D., is the Head of Riga Stradins University China Studies Center and the Head of the New Silk Road program at the Latvian Institute of International Affairs.



**Ivana Karásková**, Ph.D., is a Research Fellow, Founder and Coordinator of China Observers in Central and Eastern Europe (CHOICE) at Association for International Affairs (AMO), Czechia.



**Andreea Leonte** is an independent researcher focusing on China and the President of MaEduc, a Romanian NGO active in the field of civic education.



**Tamás Matura**, dr. jur., is an Assistant Professor at Corvinus University of Budapest and the founding President of the Central and Eastern European Center for Asian Studies, Hungary.



**Matej Šimalčík**, is an Executive Director at Central European Institute of Asian Studies (CEIAS) in Bratislava, Slovakia.

# Huawei in Central and Eastern Europe: Trends and Forecast

## **About CHOICE**

The publication was prepared within the China Observers in Central and Eastern Europe (CHOICE) collaborative platform. CHOICE monitors and evaluates the rising influence of the People's Republic of China in countries of Central and Eastern Europe which participate in the China-proposed 17+1 initiative. CHOICE strives to build a multinational platform for open discussion, experience-sharing and critical assessment.

CHOICE research appeared in New York Times, South China Morning Post, Radio Free Europe, China Dialogue, Diplomat as well as in numerous media outlets in Central and Eastern Europe.

CHOICE is run by the Association for International Affairs (AMO), a Prague-based foreign policy think tank and NGO.

#### **FOLLOW US!**

- www.chinaobservers.eu
- f www.facebook.com/ChinaObservers
- www.twitter.com/chinaobservers
- @ ChinaObservers and #ChinaObservers

#### **About AMO**

Association for International Affairs is a non-governmental non-profit organization founded in 1997. The mission of AMO has been to contribute to a deeper understanding of international affairs through a broad range of educational and research activities. Thanks to its activities in the Czech Republic and abroad and 20-year tradition, AMO has established itself as the Czech leading independent institution in the field of international relations and foreign policy.

#### IN ORDER TO ACHIEVE ITS GOALS AMO STRIVES TO:

- → formulate and publish briefing, research and policy papers;
- arrange international conferences, expert seminars, roundtables, public debates;
- → organize educational projects;
- present critical assessments and comments on current events for local and international press;
- create vital conditions for growth of a new expert generation;
- support interest in international relations in the wider public domain;
- → cooperate with like-minded local and international institutions.

#### **AMO RESEARCH CENTER**

The Research Center of the Association for International Affairs is a leading Czech think tank, which is not bound to any political party or ideology. With its activities, it supports an active approach to foreign policy, provides an independent analysis of current political issues and encourages expert and public debate on related topics. The main goal of the Research Center is systematic observation, analysis and commentary on international affairs with special focus on Czech foreign policy.

#### **FOLLOW US!**

- www.facebook.com/AMO.cz
- www.twitter.com/AMO\_cz
- www.youtube.com/AMOcz
- www.instagram.com/AMO.cz

# **Footnotes**

- "Memorandum of Understanding between the Government of Romania and the Government of the United States of America", Hotnews, November 3, 2019, https://media.hotnews.ro/media\_server1/document-2019-11-3-23464357-o-memorandum-5g-romania-sua.pdf.
- "Addition of Certain Entities to the Entity List, Revision of Entries on the Entity List, and Removal of Entities From the Entity List", Federal Register, August 14, 2019, https://www.federalregister.gov/documents/2019/08/14/2019-17409/addition-of-certain-entities-to-the-entity-list-revision-of-entries-on-the-entity-list-and-removal?fbclid=IwARomH\_LRbCrilk8mUbMl7SDC8k5CGNUh9AosEn7MFOTUF9ohouIHRaC3suQ.
- 3 "Commerce Addresses Huawei's Efforts to Undermine Entity List, Restricts Products Designed and Produced with U.S. Technologies", US Department of Commerce, https://www.commerce.gov/news/press-releases/2020/05/commerce-addresses-huaweis-efforts-undermine-entity-list-restricts.
- "Proiectul de Lege privind adoptarea unor măsuri referitoare la infrastructuri informatice și de comunicații de interes național și condițiile implementării rețelelor 5G", Ministry of Transport, Infrastructure and Communication of Romania, August 4, 2020, http://www.mt.gov.ro/web14/transparenta-decizionala/consultare-publica/acte-normative-in-avizare/3059-l04082020dcom.
- Laurens Cerulus, "Huawei challenges legality of 5G bans in Poland, Romania", Politico, November 2, 2020, https://www.politico.eu/article/huawei-hints-at-legal-action-against-5g-bans-in-poland-romania/.
- "Huawei, nemulţumit de transpunerea Memorandumului 5G cu SUA: Protejarea reţelelor nu este responsabilitatea politicienilor", economica.net, August 14, 2020, https://www.economica.net/huawei-nemultumit-de-transpunerea-memorandumului-5g-cu-sua-protejarea-retelelor-nu-este-responsabilitatea-politicienilor-eliminarea-huawei-va\_188726.html.
- PM Orban stepped down and, at the time of writing, the new prime minister has not been approved by the parliament yet. The new PM will come from the same political party as Ludovic Orban (PNL National Liberal party), so the position of Romania regarding Huawei will most likely remain the same.
- 8 "Interviu. 100 de minute cu premierul | Pensii & FMI, alegeri, 5G fără China", Radio Free Europe, November 1, 2020, https://romania.europalibera.org/a/interviu-100-de-minute-cu-premierul-alegeri-pensii-fmi-5g-fara-china/30923127.html.
- Wojciech Piechocki, "Kredyt dla P4 oficjalny komunikat operatora", GSM Online, November 3, 2006, https://gsmonline.pl/artykuly/kredyt-dla-p4-oficjalny-komunikat-operatora.
- "Huawei osiągnął pozycję numer jeden w Polsce na rynku smartfonów i chce ją utrzymać", Gazeta Prawna, April 11, 2018, https://serwisy.gazetaprawna.pl/nowe-technologie/artykuly/1116705,huawei-osiaga-pozycje-numer-jeden-w-polsce-na-rynku-smartfonow-i-liczy-ze-ja-utrzyma.html.
- "Xiaomi czy Samsung? Liderzy polskiego rynku smartfonów", Bankier.pl, May 13, 2020, https://www.bankier.pl/wiadomosc/Xiaomi-Samsung-Huawei-Apple-ranking-udzialow-w-polskim-rynku-smartfonow-7882674.html.
- 12 "Akademia Sieci Huawei", Poznan University of Technology, http://www.huawei.edu.pl.
- "Huawei Polska i Akademia Koźmiśkiego będą współpracować w ramach ICT Academy", Money.pl, November 19, 2020, https://www.money.pl/gielda/huawei-polska-i-akademia-kozminskiego-beda-wspolpracowac-w-ramach-ict-academy-6577270721599105a.html.

- "Seeds for the Future", Huawei Europe, https://www.huawei.eu/what-we-do/seeds-future.
- Joanna Plucinska, Koh Gui Qing, Alicja Ptak, and Steve Stecklow, "How Poland became a front in the cold war between the U.S. and China", Reuters, July 2, 2019, https://www.reuters.com/investigates/special-report/huawei-poland-spying/.
- "Akt oskarżenia wobec podejrzanych o szpiegostwo dla ChRL", Gov.pl, November 18, 2020, https://www.gov.pl/web/sluzby-specjalne/akt-oskarzenia-wobec-podejrzanych-o-szpiegostwo-dlachrl.
- "U.S.-Poland Joint Declaration on 5G", Kancelaria Prezesa Rady Ministrów RP, September 2, 2019, https://www.premier.gov.pl/files/files/deklaracja\_en-1.pdf.
- "Prime Minister Mateusz Morawiecki 's article in 'The Telegraph' Clean path to a new model of globalization: time for European 5G realism", Gov.pl, July 16, 2020, https://www.gov.pl/web/usa-en/prime-minister-mateusz-morawieckis-article-in-the-telegraph---clean-path-to-a-new-model-of-globalization-time-for-european-5g-realism.
- Projekt z dnia 7 września 2020 r. Ustawa o zmianie ustawy o krajowym systemie cyberbezpieczeństwa oraz ustawy Prawo zamówień publiznych", Rządowe Centrum Legislacji, September 8, 2020, https://legislacja.rcl.gov.pl/docs//2/12337950/12716602/12716603/dokument463185.pdf.
- Romania finally won the bid. Adrian Lungu, "Bucharest to host EU's new cybersecurity centre", Euractiv, December 10, 2020, https://www.euractiv.com/section/cybersecurity/news/bucharest-to-host-eus-new-cybersecurity-centre/.
- Alexandra Brzozowski and Samuel Stolton, "Poland make case for new EU cyber centre seat".

  Euractiv, November 18, 2020, https://www.euractiv.com/section/cybersecurity/news/poland-makes-the-case-for-new-eu-cyber-centre-seat/.
- "Joint Statement on United States-Latvia Joint Declaration on 5G Security", US Department of State Media Note, February 27, 2020, https://www.state.gov/joint-statement-on-united-states-latvia-joint-declaration-on-5g-security/.
- "Latvia sides with US in Huawei 5G fight", Latvijas Sabiedriskie Mediji, February 20, 2020, https://eng.lsm.lv/article/economy/economy/latvia-sides-with-us-in-huawei-5g-fight.a349114/.
- "Latvia sides with US in Huawei 5G fight", Latvijas Sabiedriskie Mediji, February 20, 2020, https://eng.lsm.lv/article/economy/economy/latvia-sides-with-us-in-huawei-5g-fight.a349114/.
- 25 Author's interview with a high-ranking Latvian official [anonymized, 2020].
- "Latvia launches first 5G military test site in Europe", Latvijas Sabiedriskie Mediji, November 13, 2020, https://eng.lsm.lv/article/society/defense/latvia-launches-first-5g-military-test-site-in-europe. a381607/.
- "Portfolio", Providence Equity, https://www.provequity.com/portfolio?name=&sector=all&region=all&vertical=all&status=all.
- "Bite Latvija will not suspend its partnership with Huawei", The Baltic Times, Additional Source: LETA, February 15, 2019, https://www.baltictimes.com/bite\_latvija\_will\_not\_suspend\_its\_partnership\_with\_huawei/.
- "Latvia sides with US in Huawei 5G fight", Latvijas Sabiedriskie Mediji, February 20, 2020, https://eng.lsm.lv/article/economy/economy/latvia-sides-with-us-in-huawei-5g-fight.a349114/.
- Maya Guzdar and Tomas Jermalavičius, "Between the Chinese Dragon and American Eagle: 5G Development in the Baltic States", Brief by the International Centre for Defence and Security, Tallin, August 2020 (4), https://icds.ee/wp-content/uploads/2020/08/ICDS-Brief\_Between-the-Chinese-Dragon-and-American-Eagle-5G-development-in-the-Baltic-states\_August-2020.pdf.

- Joanna Plucinska, Koh Gui Qing, Alicja Ptak, and Steve Stecklow, "How Poland became a front in the cold war between the U.S. and China", Reuters, July 2, 2019, https://www.reuters.com/investigates/special-report/huawei-poland-spying/.
- "National Threat Assessment 2020", State Security Department of the Republic of Lithuania and Second Investigation Department under the Ministry of National Defence, Vilnius, 2020, p. 5, https://www.vsd.lt/wp-content/uploads/2020/02/2020-Gresmes-En.pdf.
- Holger Roonemaa, Mari Eesmaa, Inese Liepiṇa, Sabīne Bērziṇa, and Naglis Navakas, "Baltics caught between superpowers in China's 5G battle Investigation." LRT English, September 10, 2019, https://www.lrt.lt/en/news-in-english/19/1095729/baltics-caught-between-superpowers-in-china-s-5g-battle-investigation.
- Xinhua, "China's Huawei sponsors Lithuanian basketball team", China.org.cn, August 1, 2014, http://www.china.org.cn/world/Off\_the\_Wire/2014-08/01/content\_33112129.htm.
- Jurga Bakaitė, "Lietuvos krepšininkai puošis Huawei logotipu [Lithuanian basketball players will adorn themselves with Huawei logo]?", LRT.lt, September 9, 2020, https://www.lrt.lt/naujienos/sportas/10/1228428/lietuvos-krepsininkai-puosis-huawei-logotipu-apzvalgininkai-vadina-tai-tarptautiniu-skandalu.
- Huawei, "Court orders Lithuanian news outlet to retract false statements on Huawei", October 11, 2019, https://www.huawei.com/au/facts/voices-of-huawei/court-orders-lithuanian-news-outlet-to-retract-false-statements-on-huawei.
- "United States Republic of Lithuania Memorandum of Understanding on 5G Security", U.S. Department of State, September 17, 2020, https://www.state.gov/united-states-republic-of-lithuania-memorandum-of-understanding-on-5g-security/.
- The Law on the Protection of Objects of Importance to Ensuring National Security of the Republic of Lithuania, adopted on October 10, 2002, last amended on January 12, 2018, https://e-seimas.lrs.lt/portal/legalAct/lt/TAD/a7ba7f40211411e88a05839ea3846d8e?jfwid=fhhu5mp5n.
- Telia Lietuva, "Telia is launching 5G network in Lithuania", November 10, 2020, https://www.telia.lt/pranesimai-spaudai/telia-is-launching-5g-network-in-lithuania.
- Andrius Sytas, "Lithuania to support those 'fighting for freedom' in Taiwan", Reuters, November 9, 2020, https://www.reuters.com/article/us-lithuania-china-idUSKBN27P1PQ.
- NÚKIB, "Varování", December 17, 2018, https://nukib.cz/download/uredni\_deska/Varovani\_NUKIB\_2018-122-17.pdf.
- Jason Hovet and Robert Muller, "China's Huawei excluded from Czech tax tender after security warning", Reuters, January 30, 2019, https://www.reuters.com/article/us-czech-security/chinas-huawei-excluded-from-czech-tax-tender-after-security-warning-idUSKCN1PO10G.
- "Pražské letiště vyloučilo kvůli bezpečnosti z výběrového řízení skennery od Huawei", Aktuálně, August 23, 2019, https://zpravy.aktualne.cz/ekonomika/prazske-letiste-vyloucilo-kvuli-bezpecnost-z-vyberoveho-rize/r~d1f8835ac5c911e9b5e8ac1f6b220ee8/.
- "Čínský velvyslanec o naší schůzce lhal, uvedl Babiš", Novinky, January 6, 2019, https://www.novinky.cz/domaci/clanek/cinsky-velvyslanec-o-nasi-schuzce-lhal-uvedl-babis-40266795.
- Marc Santora, "Huawei Threatens Lawsuit Against Czech Republic After Security Warning", New York Times, February 8, 2019, https://www.nytimes.com/2019/02/08/business/huawei-lawsuit-czech-republic.html.
- "Czechs unlikely to differ from Germany on Huawei approach: minister", Reuters, October 24, 2019, https://www.reuters.com/article/us-czech-telecoms-idUSKBN1X3oTV.
- Daniel Anýž, "Pompeo do Prahy přivezl memoranda proti Huaweii a zájmům Číny a Ruska, k podpisu ale nedošlo", iHNed, August 12, 2020, https://archiv.ihned.cz/c1-66802130-pompeo-do-prahy-privezl-memoranda-proti-huaweii-a-zajmum-ciny-a-ruska-k-podpisu-ale-nedoslo.

- Similarly, Lithuania called for the issue to be decided within the EU or NATO.
- David Slížek, "HN: Český Vodafone použijr technologie Huawei jen v okrajových částech 5G sítí", Lupa, May 22, 2020, https://www.lupa.cz/aktuality/hn-cesky-vodafone-pouzije-technologie-huawei-jen-v-okrajovych-castech-5g-siti/.
- "UPDATE 1-Czech telecoms group CETIN chooses Ericsson for 5G network", Reuters, October 19, 2020, https://in.reuters.com/article/czech-telecoms-5g/update-1-czech-telecoms-group-cetin-chooses-ericsson-for-5g-network-idINL8N2HA380.
- Seminar on cybersecurity of 5G, Ministry of Trade and Industry of the Czech Republic, Prague, November 24, 2020.
- 52 www.5gvcesku.cz.
- 53 "Právní analýza kanceláře AK Toman", www.5GvCesku.cz, https://www.5gvcesku.cz/DATA/dokumenty/A\_Toman\_Pravni\_stanovisko\_Implementace\_EU\_Toolbox.pdf.
- "Význam budování 5G sítí v České republice", CETA, March 2020, http://eceta.cz/wp-content/uploads/2020/03/Studie\_5G\_key\_032020.pdf.
- Lukáš Valášek, "Ze špionáže podezřelý Huawei vede kampaň za 5G. Využil nezávisle se tvářící institut", Aktuálně, April 14, 2020, https://zpravy.aktualne.cz/domaci/site-5g-se-bez-huawei-prodrazi-o-38-miliard-tvrdi-studie-cis/r~6e44780078bb11ea9d74ac1f6b220ee8/.
- MapInfluenCE research to be published in 2021.
- 57 "Raši v Číne: Slovensko bude otvorené spolupráci na 5G", CyberSec, November 8, 2019, https://cybersec.sk/spravy/z-domova/rasi-v-cine-slovensko-bude-otvorene-spolupraci-na-5g/.
- SITA, "Slovensku hrozí trojmiliónová pokuta od eurokomisie pre omeškanie 5G siete", SME, September 27, 2020, https://ekonomika.sme.sk/c/22497521/slovensku-hrozi-trojmilionova-pokuta-od-eurokomisie-pre-omeskanie-5g-siete.html.
- "Správa o činnosti SIS za rok 2019", Slovak Information Service (SIS), September 2020, https://www.sis.gov.sk/pre-vas/sprava-o-cinnosti.html.
- Mirek Tóda, "Je to vec princípu a hodnôt. Prezidentka vysvetľuje, prečo nechcela ísť na Globsec s logom Huaweiu", October 6, 2020, https://dennikn.sk/2074397/je-to-vec-principu-a-hodnot-prezidentka-vysvetluje-preco-nechcela-ist-na-globsec-s-logom-huawei/.
- "United States Slovak Republic Joint Declaration on 5G Security", United States Department of State, October 23, 2020, https://www.state.gov/united-states-slovak-republic-joint-declaration-on-5g-security/.
- "Štát a mobilní operátori: na bezpečnosti 5G sietí nám záleží", Národný bezpečnostný úrad, August 6, 2020, https://www.nbu.gov.sk/2020/08/06/stat-a-mobilni-operatori-na-bezpecnosti-5g-sieti-nam-zalezi/index.html.
- Martina Raábová, "Swan si požičal od Bank of China, založil celú svoju sieť", June 1, 2017, https://ekonomika.sme.sk/c/20547983/swan-si-pozical-od-bank-of-china-zalozil-celu-svoju-siet. html.
- Juraj Procházka, "4ka uvádza 5G technológiu ako prvá na Slovensku", TechBox, July 10, 2019, https://techbox.dennikn.sk/temy/4ka-uvadza-5g-technologiu-ako-prva-na-slovensku/.
- 65 "O2 dnes spustilo komerčný testovací režim 5G. Kde a ako sa pripojíte?", TechBox, October 7, 2020, https://techbox.dennikn.sk/02-dnes-spustilo-komercny-testovaci-rezim-5g-kde-a-ako-sa-pripojite/.
- Matej Šimalčík, Richard Q. Turcsányi, Kristína Kironská, and Renáta Sedláková, "Slovak public opinion on China in the age of COVID-19: Caught between values and conspiracies", Central European Institute of Asian Studies, 2020, https://ceias.eu/wp-content/uploads/2020/11/COMP-poll-report\_3.pdf.

- Matej Šimalčík, Richard Q. Turcsányi, Kristína Kironská, and Renáta Sedláková, "Slovak public opinion on China in the age of COVID-19: Caught between values and conspiracies", Central European Institute of Asian Studies, 2020, https://ceias.eu/wp-content/uploads/2020/11/COMP-poll-report\_3.pdf.
- See e.g. Dávid Igaz, "Huawei na margo útokov: Vlády odmietajú dôkazy, postoj Slovenska nás zaráža. Nejak dokážeme, že sme "čistí" (rozhovor)", Fontech Startitup, October 21, 2020, https://fontech.startitup.sk/huawei-ceo-slovensko-exkluzivny-rozhovor/.
- Miro Kern, "Problém Hikvision: Ako Slovensko púšťa rizikovú čínsku firmu do bezpečnostnej infraštruktúry", November 19, 2020, https://dennikn.sk/2149583/problem-hikvision-ako-slovensko-pusta-rizikovu-cinsku-firmu-do-bezpecnostnej-infrastruktury/?ref=tit.
- 70 "Bezpečnostná stratégia Slovenskej republiky", Vláda SR, 2020, https://rokovania.gov.sk/RVL/Material/25570/1.
- "Hungarian minister opens door to Huawei for 5G network rollout", Reuters, November 5, 2019, https://www.reuters.com/article/us-hungary-telecoms-huawei-idUSKBN1XF12U.
- Huawei was mentioned in the following speeches in the Hungarian National Assembly: MP Kocsis-Cake Olivio, 102nd assembly day (December 10, 2019), speech Nr. 14., reply by Minister of Foreign Affairs Péter Szijjártó, 102nd assembly day (December 10, 2019.), speech Nr. 40; MP Tordai Bence, 92nd assembly day (November 11, 2019), speech Nr. 70., reply by State Secretary of the Ministry of Interior Kontrát Károly, 92nd assembly day (November 11, 2019), speech Nr. 72; MP Dr. Lukács László György, 92nd assembly day (November 11, 2019), speech Nr. 78., reply by State Secretary of the Ministry of Interior Kontrát Károly, 92nd assembly day (November 11, 2019), speech Nr. 80; MP Dr. Vadai Ágnes, 72nd assembly day (June 13, 2019), speech Nr. 60.
- "Huawei to Set up R+D Centre in Budapest", MTI-Hungary Today, October 20, 2020, https://hungarytoday.hu/szijjarto-huawei-budapest-hungary-china-ties/.